

## **PART V**

### **POST-RETIREMENT ANNUITY INCREASES AND TAXES**

#### **A. INTRODUCTION**

Chart 5, on pages 34 and 35, shows the provisions of each plan for increasing retirement annuities after an employee has retired. Chart 5 also shows how annuity payments from each plan are treated under that state's income tax laws. In addition, benefit adjustments in the Social Security program over the last 10 years and income taxation of Social Security benefits are also discussed in this part.

#### **B. SOCIAL SECURITY**

Pension designers are concerned with the adequacy of benefits at the time of retirement and also with the continuing purchasing power of those benefits during retirement as affected by inflation. Since 1975, Social Security benefits have been automatically adjusted each year by the percentage increase in the consumer price index (CPI). The increases in Social Security benefits for each of the last 10 years are shown below and displayed in Figure 10, *Social Security CPI % Adjustments 2000 to 2009*:

<u>CPI Year</u>	<u>Date on Which First Payable</u>	<u>Percentage Increase</u>
2000	1/1/2001	3.5%
2001	1/1/2002	2.6%
2002	1/1/2003	1.4%
2003	1/1/2004	2.1%
2004	1/1/2005	2.7%
2005	1/1/2006	4.1%
2006	1/1/2007	3.3%
2007	1/1/2008	2.3%
2008	1/1/2009	5.8%
2009	1/1/2010	0.0%

For those employees in the 70 of the 87 plans in this report (80%) that are also covered by the Social Security program, at least that portion of their total retirement income that is received from Social Security automatically keeps pace with inflation.

Under federal law, up to 50% of Social Security benefits are subject to income taxation if the taxpayer's adjusted gross income is between \$25,000 and \$34,000 for single taxpayers or between \$32,000 and \$44,000 for married taxpayers filing a joint income tax return. If a taxpayer's income exceeds these levels, then 85% of his or her Social Security benefits are subject to federal income taxation.

State income taxation of Social Security benefits varies. Twenty-six states completely exempt Social Security benefits from income taxation. Fifteen states impose income taxes on all or a

portion of Social Security benefits and nine states have no personal income tax or a very limited personal income tax that does not affect Social Security payments.

### C. POST-RETIREMENT ANNUITY COST-OF-LIVING ADJUSTMENTS

Most of the plans in this report have provisions for post-retirement annuity adjustments to protect the purchasing power of annuities against inflation. The provisions of each of the plans are described in the fourth column of Chart 5. The following table summarizes and compares the post-retirement annuity adjustment provisions found in the 2006 Report against those found in the 2008 Report:

	<u>2006</u>	<u>2008</u>
Adjustments indexed to CPI	38 plans	35 plans
Automatic percentage increase	23 plans	26 plans
Investment surplus	4 plans	5 plans
Ad hoc (any increase must be authorized by Legislature or a decision-making board) or money purchase	20 plans	19 plans
No increase	0 plans	2 plans
<b>TOTAL</b>	<b>85 plans</b>	<b>87 plans</b>

Note that, as shown in Chart 5, many of the plans in which post-retirement annuity increases are indexed to the CPI also include a cap on the total percentage adjustment that may be made within any given year. Also, many of the plans in which post-retirement annuity increases are indexed to the CPI or are automatic also include provisions for additional annuity adjustments if there are investment surpluses in the retirement fund. Nineteen of the 87 plans are either money purchase plans or provide post-retirement annuity increases only on an "ad hoc" basis, where either the Legislature or a decision-making board determines whether, and when, a post-retirement annuity increase is granted. See Figure 11, *2008 Cost of Living Adjustments (COLA)*, for a graphical representation.

### D. STATE INCOME TAXATION OF ANNUITIES

The last column of Chart 5 shows the treatment of pension benefits under each of the plans by the state income tax laws in effect in that state. In 23 of the 87 plans, pension benefits are subject to state income taxation and no specific amount of retirement benefits is tax exempt. In 21 of the 87 plans, pension benefits are totally exempt from state income taxation. Eleven of the plans are in states with no income taxation.

Caution must be used in interpreting the information in the last column of Chart 5. In many of the states in which pension income is fully taxable, other provisions of state income tax laws may ameliorate or completely eliminate the effect of the state income tax laws on retirees. For example, some state income tax laws have a level of exemptions, deductions, or tax credits that substantially reduce or eliminate state income taxation for persons at certain income levels. In addition, some of these exemptions, deductions, or tax credits may be increased for taxpayers who have reached a certain age. In these states, the level of income taxation on retirees may be equal to or less than that in states where public employee pension income is exempt from state income taxation.

## E. TRENDS

Most of the plans in this report have adopted provisions in which retirement annuities are annually increased, either by a set percentage or in response to changes in the CPI. These provisions were mostly adopted in the 1970s and 1980s, in response to the high inflation that occurred in those years.

## F. THE WRS

Retirees in the WRS whose annuities are paid from the “core” fund receive annual annuity adjustments tied to whether reserve surpluses in the fund, as adjusted by a formula, are sufficient to generate an increase. In addition, the annual adjustment may result in a reduction of annuities if investment losses are severe, particularly if investment losses occur over a number of consecutive years. However, annuities paid from the “core” fund may not be reduced below the level initially paid to a retiree. For annuities paid in 2008, the annuity adjustment in the core fund was -2.1%.

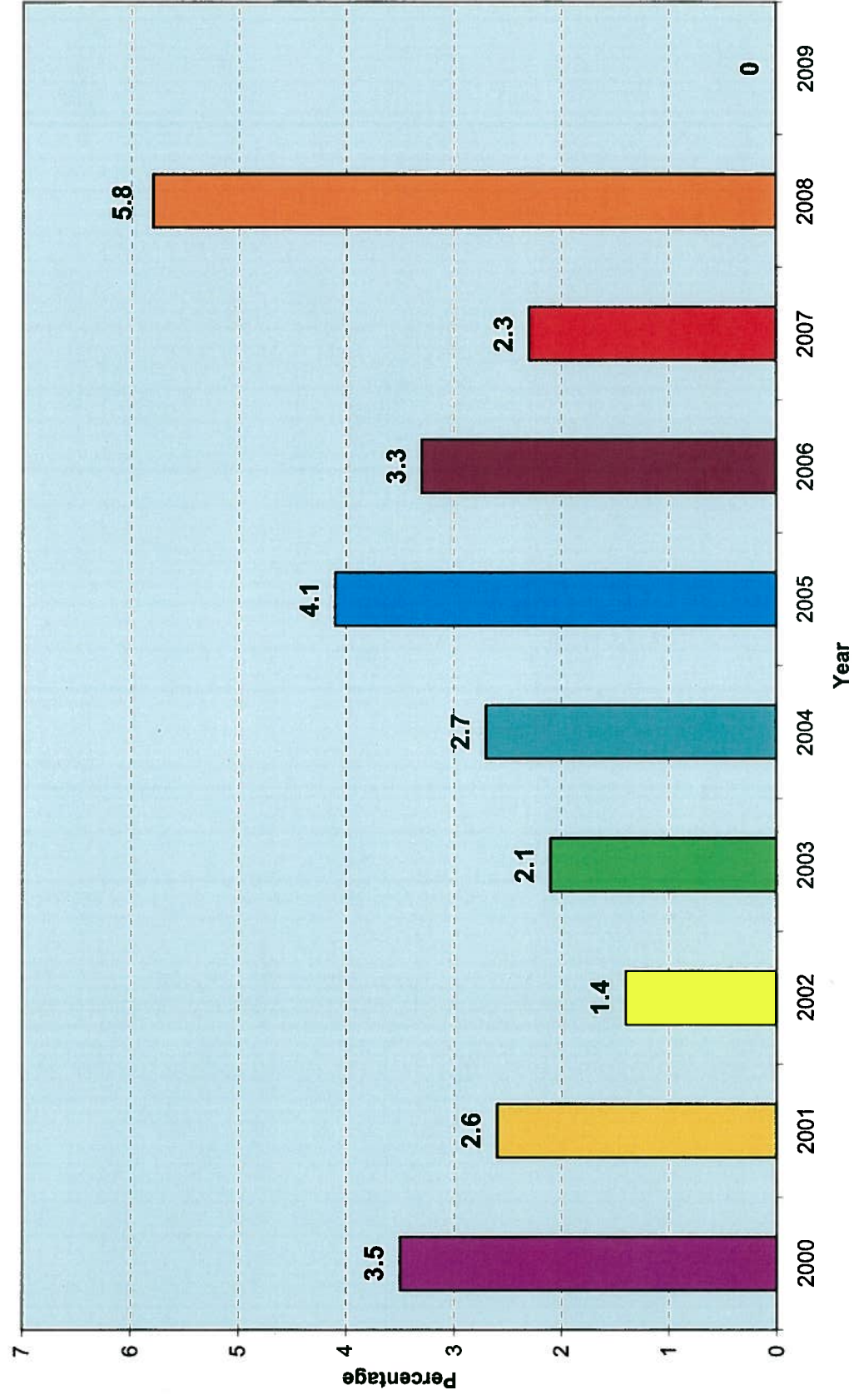
WRS retirement benefits are subject to state income taxation except for certain payments made with respect to persons who were employees prior to 1964 or who had retired prior to 1964. Beginning in 2008, income from Social Security will be completely exempt from Wisconsin income taxes. Beginning in 2009, up to \$5,000 per year of income from qualified retirement plans is exempt from Wisconsin income taxes for taxpayers with an adjusted gross income of \$15,000 or less (\$30,000 for married joint filers) who are 65 or older.

CHART V  
POST-RETIREMENT INCREASES AND STATE TAX PROVISIONS

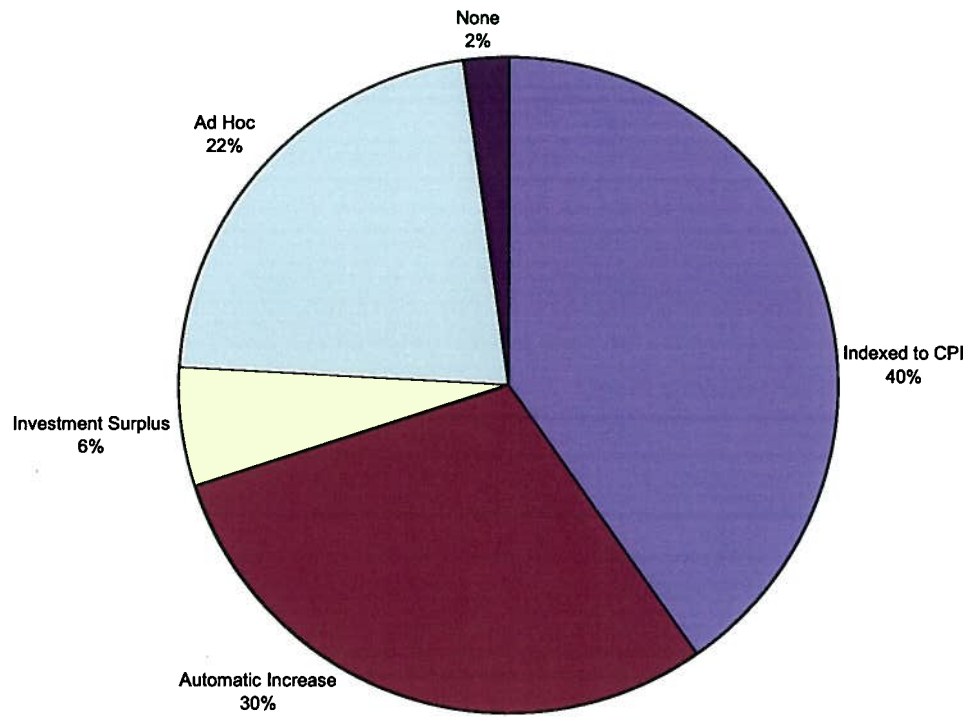
	<u>State</u>	<u>Fund Name</u>	<u>Social Security</u>	<u>Annual Post-Retirement Increases</u>	<u>State Taxation of PERS Benefits</u>
1	Alabama	ERS	Yes	Ad hoc only	Benefits exempt
2	Alabama	TRS	Yes	Ad hoc only	Benefits exempt
3	Alaska	PERS	No	N/A: acct balance + invest earnings	No income tax law
4	Alaska	TRS	No	N/A: acct balance + invest earnings	No income tax law
5	Arizona	SRS	Yes	Excess earnings - 4% cap	Exempt to \$2,500
6	Arkansas	PERS	Yes	3%	Exempt to \$6,000
7	Arkansas	TRS	Yes	3%	Exempt to \$6,000
8	California	PERS	Yes	2%	Benefits taxable
9	California	TRS	No	2%	Benefits taxable
10	Colorado	PERA	No	Lesser of 3%, CPI, or 10% of COLA fund assets	Exempt to \$20,000/\$24,000
11	Connecticut	SERS	Yes	60% of CPI up to 6%, 2.5% minimum	Benefits taxable
12	Connecticut	TRS	No	Excess earnings - 1.5% or 6% cap	Benefits taxable
13	Delaware	SEPP	Yes	Ad hoc only	Exempt to \$12,500
14	Florida	FRS	Yes	3%	No state income tax
15	Georgia	ERS	Yes	CPI - 1.5% semi-annual cap	Exempt to \$35,000
16	Georgia	TRS	Yes	CPI - 1.5% semi-annual cap	Exempt to \$35,000
17	Hawaii	ERS	Yes	2.5%	Benefits exempt
18	Idaho	PERS	Yes	CPI - 1% minimum to 6% max (conditional)	Benefits taxable
19	Illinois	SERS	Yes	3%	Benefits exempt
20	Illinois	TRS	No	3%	Benefits exempt
21	Illinois	MRF	Yes	3%	Benefits exempt
22	Indiana	PERF	Yes	Ad hoc only (1.5% presumed)	Benefits taxable
23	Indiana	TRF	Yes	Ad hoc only (1.5% presumed)	Benefits taxable
24	Iowa	PERS	Yes	Excess earnings - CPI; 3% cap	Exempt to \$6,000, \$12,000 married
25	Kansas	PERS	Yes	Ad hoc only	Benefits exempt
26	Kentucky	ERS	Yes	1.5%	Exempt to \$41,110
27	Kentucky	CERS	Yes	1.5%	Exempt to \$41,110
28	Kentucky	TRS	No	1.5%	Exempt to \$41,110
29	Louisiana	SERS	No	Excess earnings; CPI; 3% cap	Benefits exempt
30	Louisiana	TRSL	No	CPI - 3% cap	Benefits exempt
31	Maine	SRS	No	CPI - 4% cap	Exempt to \$6,000
32	Maryland	SRS	Yes	CPI - 3% cap	Exempt to \$23,600
33	Massachusetts	SERS	No	CPI - on 1st \$12,000-conditional, 3% cap	Benefits exempt
34	Massachusetts	TRS	No	CPI - on 1st \$12,000-conditional, 3% cap	Benefits exempt
35	Michigan	SERS	Yes	3% (\$300 annual cap)	Benefits exempt
36	Michigan	MERS	Yes	3 plans - depending on employer agreement (generally 2.5%)	Benefits exempt
37	Michigan	PSERS	Yes	3%	Benefits exempt
38	Minnesota	MSRS	Yes	CPI - 2.5% cap plus investment surplus	Benefits taxable
39	Minnesota	PERA	Yes	CPI - 2.5% cap plus investment surplus	Benefits taxable
40	Minnesota	TRA	Yes	CPI - 2.5% cap plus investment surplus	Benefits taxable

41	Mississippi	PERS	Yes	3%	Benefits exempt
42	Missouri	SERS	Yes	80% CPI - 5% cap	Exempt to \$6,000/\$12,000
43	Missouri	LAGERS	Yes	CPI - 4% cap	Exempt to \$6,000/\$12,000
44	Missouri	PSRS	No	CPI - 5% cap; 80% of original benefits lifetime cap	Exempt to \$6,000/\$12,000
45	Montana	PERS	Yes	3%	Exempt to \$3,600
46	Montana	TRS	Yes	1.5%	Exempt to \$3,600
47	Nebraska	SERS	Yes	Money purchase	Benefits taxable
48	Nebraska	CERS	Yes	Money purchase	Benefits taxable
49	Nebraska	SPP	Yes	CPI - 2.5% cap	Benefits taxable
50	Nevada	PERS	No	2% to 5% (varies)	No income tax law
51	New Hampshire	NHRS	Yes	Ad hoc	Benefits exempt
52	New Jersey	PERS	Yes	60% of CPI	Exempt to \$15,000/\$20,000
53	New Jersey	TPAF	Yes	60% of CPI	Exempt to \$15,000/\$20,000
54	New Mexico	PERA	Yes	3%	Benefits taxable
55	New Mexico	ERA	Yes	50% of CPI - 2% min; 4% cap	Benefits taxable
56	New York	ERS	Yes	50% of CPI, max 3% on 1st \$18,000	Benefits exempt
57	New York	TRS	Yes	50% of CPI, max 3% on 1st \$18,000	Benefits exempt
58	North Carolina	TSERS	Yes	Ad hoc	Exempt to \$4,000/\$8,000
59	North Carolina	LGERS	Yes	Ad hoc	Exempt to \$4,000/\$8,000
60	North Dakota	PERS	Yes	Ad hoc	Benefits taxable
61	North Dakota	TRF	Yes	Ad hoc	Benefits taxable
62	Ohio	PERS	No	3% cap	Benefits taxable
63	Ohio	STRS	No	3% cap	Benefits taxable
64	Oklahoma	PERS	Yes	Ad hoc	Exempt to \$10,000
65	Oklahoma	TRS	Yes	Ad hoc	Exempt to \$10,000
66	Oregon	PERS	Yes	CPI - 2% cap	Benefits taxable
67	Pennsylvania	SERS	Yes	Ad hoc	Benefits exempt
68	Pennsylvania	PSERS	Yes	Ad hoc	Benefits exempt
69	Rhode Island	ERS	Yes	3%	Benefits taxable
70	South Carolina	SCRS	Yes	CPI - 4% cap	\$15,000 deduction
71	South Dakota	SRS	Yes	3.1%	No income tax law
72	Tennessee	CRS	Yes	CPI - 3% cap	Benefits exempt
73	Texas	ERS	Yes	Ad hoc	No income tax law
74	Texas	TRS	No	Ad hoc	No income tax law
75	Texas	MRS	Yes	Up to 70% of CPI (employer option)	No income tax law
76	Utah	SRS	Yes	CPI - 4% cap	Exempt to \$7,500/\$15,000
77	Vermont	SRS	Yes	50% of CPI - 5% cap	Benefits taxable
78	Vermont	TRS	Yes	50% of CPI - 5% cap	Benefits taxable
79	Virginia	SRS	Yes	CPI - 5% cap	Exempt to \$12,000
80	Washington	PERS	Yes	CPI - 3% cap	No income tax law
81	Washington	TRS	Yes	CPI - 3% cap	No income tax law
82	West Virginia	PERS	Yes	No	Exempt to \$2,000
83	West Virginia	TRS	Yes	No	Exempt to \$2,000
84	Wyoming	WRS	Yes	CPI - 3% cap	No income tax law
85	Milwaukee	City	Yes	1.5% yrs 1-4; 2% thereafter	Exempt for some
86	Milwaukee	County	Yes	2%	Exempt for some
87	Wisconsin	WRS	Yes	Investment earnings; reductions possible	Exempt for some

**Figure 10. Social Security CPI % Adjustments 2000 to 2009**



**Figure 11. 2008 Cost of Living Adjustments (COLA)**







## **PART VI**

### **ACTUARIAL AND ACCOUNTING INFORMATION**

#### **A. INTRODUCTION**

Chart 6, on pages 42 and 43, provides selected actuarial and accounting information about each of the plans in the report. This part of the report discusses the actuarial method used by each of the plans, provides the interest assumption, wage inflation assumption, and economic spread for each of the plans, and provides the Governmental Accounting Standards Board (GASB) 25 funding ratio for each of the plans in 2008.

#### **B. ACTUARIAL METHODS**

The third column in Chart 6 lists the actuarial methods used by each of the 87 plans. An actuarial method is a procedure for determining the present value of pension benefits that will be paid in the future and allocating that value and the cost of the benefits to specific time periods. There are a number of accepted actuarial methods that presumably will reach the goal of fully funding all pension obligations as they become due, but they allocate costs in different ways during the period of employment of participants in the plan.

Sixty-nine, or 79%, of the 87 plans use the entry age actuarial method; 14, or 16%, of the 87 plans use the unit credit method; four of the 87 plans use the aggregate cost method or other methods.

#### **C. INTEREST ASSUMPTION**

The interest assumption, which is also sometimes referred to as the “earnings assumption,” is one of the key economic assumptions in determining the level of contribution rates. The fourth column in Chart 6 provides the interest assumption for each of the 87 plans in the report. This information is compared with previous reports in the following table:

<u>Interest Assumption</u>	<u>2000</u>	<u>2004</u>	<u>2006</u>	<u>2008</u>
From 5% to 7%	1 plan	1 plan	1 plan	1 plan
Over 7% to 8%	56 plans	59 plans	61 plans	63 plans
Over 8%	27 plans	24 plans	23 plans	21 plans
Not determined or not applicable	1 plan	1 plan	0 plans	2 plans
<b>TOTAL</b>	<b>85 plans</b>	<b>85 plans</b>	<b>85 plans</b>	<b>87 plans</b>

See Figure 12, *2008 Plan Interest Assumptions*, for a graphical representation of current data.

#### **D. ECONOMIC SPREAD**

Another key economic assumption in pension planning is the assumption of the wage inflation rate or general salary increases in excess of those provided for merit or seniority. The difference between the wage inflation assumption and the interest assumption is often referred to as the

“economic spread,” which is the assumed real rate of return on invested assets above the wage inflation rate. The fifth and sixth columns of Chart 6 show the wage inflation assumptions and the resultant economic spread for each of the plans in the report.

## E. FUNDING RATIO

Until 1995, the GASB required public pension plans to disclose the “pension benefit obligation,” which is a measure of the present value of pension benefits, adjusted for the affects of projected salary increases. The pension benefits were estimated only on service earned by employees up to the date of the estimate.

GASB 25, issued in November 1994, requires that for funding disclosures beginning with periods after June 15, 1996, the funding disclosures be based upon regular actuarial valuations. Included in the requirements under GASB 25 is a “schedule funding progress that reports the actuarial value of assets, the actuarial accrued liability and the relationship between the two over time....”

The following table summarizes the funding ratios for each of the plans in the 2008 Report and compares them with the 2006, 2004, and 2000 Reports.

<u>Funding Ratio</u>	<u>2000</u>	<u>2004</u>	<u>2006</u>	<u>2008</u>
More than 100%	33 plans	9 plans	7 plans	10 plans
90% to 100%	22 plans	28 plans	21 plans	19 plans
80%, but less than 90%	14 plans	19 plans	20 plans	18 plans
70%, but less than 80%	5 plans	15 plans	17 plans	24 plans
60%, but less than 70%	1 plan	7 plans	11 plans	6 plans
50%, but less than 60%	1 plan	3 plans	3 plans	6 plans
Less than 50%	3 plans	2 plans	3 plans	2 plans
Not determined	6 plans	2 plans	3 plans	2 plans
<b>TOTAL</b>	<b>85 plans</b>	<b>85 plans</b>	<b>85 plans</b>	<b>87 plans</b>

See Figure 13, *2008 Plan Funding Ratios*, for a graphical representation of current data.

## F. TRENDS

Funding ratios of more than 100% have decreased substantially since the 2000 Report, reflecting the general decline in earnings that occurred during the period. However, there was a small increase between 2006 and 2008. Thirty-three plans had funding ratios in excess of 100% in 2000, but only 10 plans had funding ratios in excess of 100% in 2008. However, 33% of the plans studied had funding ratios of 90% or more in 2008. The average funding ratio in 2008 was 81%.

The entry age method is still the predominant method used by the plans studied.

## G. THE WRS

The actuarial method used by the WRS is entry age. The interest assumption for 2008 is 7.8% and the “economic spread” is 3.7%.

For 2008, the funding ratio for the WRS was 99.7%, which was greater than the average funding ratio of 81% for the plans studied.

CHART VI  
ACTUARIAL AND ACCOUNTING PROVISIONS

	<u>State</u>	<u>Fund Name</u>	<u>Actuarial Method</u>	<u>Interest Assumption</u>	<u>Wage Inflation</u>	<u>Economic Spread</u>	<u>Funded Ratio</u>
1	Alabama	ERS	Entry age	8.00%	4.50%	3.50%	75.90%
2	Alabama	TRS	Entry age	8.00%	4.50%	3.50%	77.60%
3	Alaska	PERS	Unit credit	N/A	N/A	N/A	N.D.
4	Alaska	TRS	Unit credit	N/A	N/A	N/A	N.D.
5	Arizona	SRS	Unit credit	8.00%	4.25%	3.75%	82.20%
6	Arkansas	PERS	Entry age	8.00%	4.00%	4.00%	90.00%
7	Arkansas	TRS	Entry age	8.00%	4.00%	4.00%	84.90%
8	California	PERS	Entry age	7.75%	3.00%	4.75%	87.20%
9	California	TRS	Entry age	8.00%	3.25%	4.75%	89.00%
10	Colorado	PERA	Entry age	8.50%	3.75%	4.75%	67.90%
11	Connecticut	SERS	Unit credit	8.25%	4.00%	4.25%	51.92%
12	Connecticut	TRS	Entry age	8.50%	4.00%	4.50%	70.00%
13	Delaware	SEPP	Entry age	8.00%	3.75%	4.25%	103.10%
14	Florida	FRS	Entry age	7.75%	3.00%	4.75%	105.35%
15	Georgia	ERS	Entry age	7.50%	3.75%	3.75%	89.40%
16	Georgia	TRS	Entry age	7.50%	3.75%	3.75%	94.70%
17	Hawaii	ERS	Entry age	8.00%	4.00%	4.00%	67.50%
18	Idaho	PERS	Entry age	7.25%	4.50%	3.25%	93.30%
19	Illinois	SERS	Unit credit	8.50%	3.00%	5.50%	46.10%
20	Illinois	TRS	Unit credit	8.50%	3.50%	5.00%	56.00%
21	Illinois	MRF	Entry age	7.50%	4.00%	3.50%	84.30%
22	Indiana	PERF	Entry age	7.25%	N.D.	N.D.	98.20%
23	Indiana	TRF	Entry age	7.50%	3.25%	4.25%	48.20%
24	Iowa	PERS	Entry age	7.50%	4.00%	3.50%	89.13%
25	Kansas	PERS	Entry age	8.00%	4.00%	4.00%	70.80%
26	Kentucky	ERS	Entry age	7.75%	3.50%	4.25%	54.20%
27	Kentucky	CERS	Entry age	7.75%	3.50%	4.25%	77.10%
28	Kentucky	TRS	Unit credit	7.50%	4.00%	3.50%	68.20%
29	Louisiana	SERS	Unit credit	8.25%	N.D.	N.D.	67.00%
30	Louisiana	TRSL	Unit credit	8.25%	3.20%	5.25%	70.20%
31	Maine	SRS	Entry age	7.75%	4.50%	3.25%	79.70%
32	Maryland	SRS	Entry age	7.75%	3.50%	4.25%	78.62%
33	Massachusetts	SERS	Entry age	8.25%	N.D.	N.D.	71.60%
34	Massachusetts	TRS	Entry age	8.25%	N.D.	N.D.	73.90%
35	Michigan	SERS	Entry age	8.00%	3.50%	4.50%	71.10%
36	Michigan	MERS	Entry age	8.00%	4.50%	3.50%	77.70%
37	Michigan	PSERS	Entry age	8.00%	3.50%	4.50%	71.50%
38	Minnesota	MSRS	Entry age	8.50%	4.50%	4.00%	90.18%
39	Minnesota	PERA	Entry age	8.50%	4.50%	4.00%	73.60%
40	Minnesota	TRA	Entry age	8.50%	4.50%	4.00%	81.99%
41	Mississippi	PERS	Entry age	8.00%	4.00%	4.00%	72.90%
42	Missouri	SERS	Entry age	8.50%	4.00%	4.50%	85.90%
43	Missouri	LAGERS	Entry age	7.50%	4.00%	3.50%	97.50%
44	Missouri	PSRS	Entry age	8.00%	3.25%	4.75%	83.40%
45	Montana	PERS	Entry age	8.00%	4.25%	3.75%	90.00%

46	Montana	TRS	Entry age	7.75%	4.50%	3.25%	79.90%
47	Nebraska	SERS	Entry age	7.75%	3.50%	4.10%	103.40%
48	Nebraska	CERS	Entry age	7.75%	3.50%	4.10%	108.10%
49	Nebraska	SPP	Entry age	8.00%	3.50%	4.50%	90.60%
50	Nevada	PERS	Entry age	8.00%	3.50%	4.50%	76.20%
51	New Hampshire	NHRS	Entry age	8.50%	3.50%	5.00%	67.80%
52	New Jersey	PERS	Unit credit	8.25%	4.00%	4.25%	77.40%
53	New Jersey	TPAF	Unit credit	8.25%	4.00%	4.25%	72.10%
54	New Mexico	PERA	Entry age	8.00%	4.00%	4.00%	92.00%
55	New Mexico	ERB	Entry age	8.00%	3.00%	5.00%	71.50%
56	New York	ERS	Aggregate	8.00%	3.00%	5.00%	105.80%
57	New York	TRS	Aggregate	8.00%	3.00%	5.00%	104.20%
58	North Carolina	TSERS	Entry age	7.25%	N.D.	N.D.	104.70%
59	North Carolina	LGERS	Entry age	7.25%	N.D.	N.D.	99.50%
60	North Dakota	PERS	Entry age	8.00%	4.50%	3.50%	92.60%
61	North Dakota	TRF	Entry age	8.00%	3.00%	5.00%	81.90%
62	Ohio	PERS	Entry age	8.00%	4.00%	4.00%	96.30%
63	Ohio	STRS	Entry age	8.00%	3.00%	5.00%	79.10%
64	Oklahoma	PERS	Entry age	7.50%	3.00%	4.50%	73.00%
65	Oklahoma	TRS	Entry age	8.00%	3.00%	5.00%	50.50%
66	Oregon	PERS	Unit credit	8.00%	2.75%	5.25%	112.20%
67	Pennsylvania	SERS	Entry age	8.00%	3.30%	4.70%	89.00%
68	Pennsylvania	PSERS	Entry age	8.25%	3.25%	5.00%	91.20%
69	Rhode Island	ERS	Entry age	8.25%	3.00%	5.25%	57.50%
70	South Carolina	SCRS	Entry age	7.25%	3.00%	4.25%	69.70%
71	South Dakota	SRS	Entry age	7.75%	N.D.	N.D.	97.20%
72	Tennessee	CRS	Entry age- FIL**	7.50%	3.00%	4.50%	96.20%
73	Texas	ERS	Entry age	8.00%	3.50%	4.50%	92.60%
74	Texas	TRS	Entry age	8.00%	3.00%	5.00%	86.20%
75	Texas	MRS	Unit credit	7.00%	3.00%	4.00%	74.40%
76	Utah	SRS	Entry age	7.75%	3.00%	4.75%	84.20%
77	Vermont	SRS	Entry age	8.25%	3.00%	5.25%	94.10%
78	Vermont	TRS	Entry age	8.25%	3.00%	5.25%	80.90%
79	Virginia	SRS	Entry age	7.50%	2.50%	5.00%	82.30%
80	Washington	PERS	Hybrid	8.00%	3.50%	4.50%	119.89%
81	Washington	TRS	Hybrid	8.00%	3.50%	4.50%	130.37%
82	West Virginia	PERS	Entry age	7.50%	3.00%	4.50%	84.20%
83	West Virginia	TRS	Entry age	7.50%	3.00%	4.50%	50.00%
84	Wyoming	WRS	Entry age	8.00%	3.50%	4.50%	78.60%
85	Milwaukee	City	Unit credit	8.50%	3.00%	5.50%	99.10%
86	Milwaukee	County	Entry age	8.00%	3.00%	5.00%	95.70%
87	Wisconsin	WRS	Entry age-FIL	7.80%	4.10%	3.70%	99.70%

\*N.D. = Not defined.

\*\*FIL = Frozen initial liability method.

Figure 12. 2008 Plan Interest Assumptions

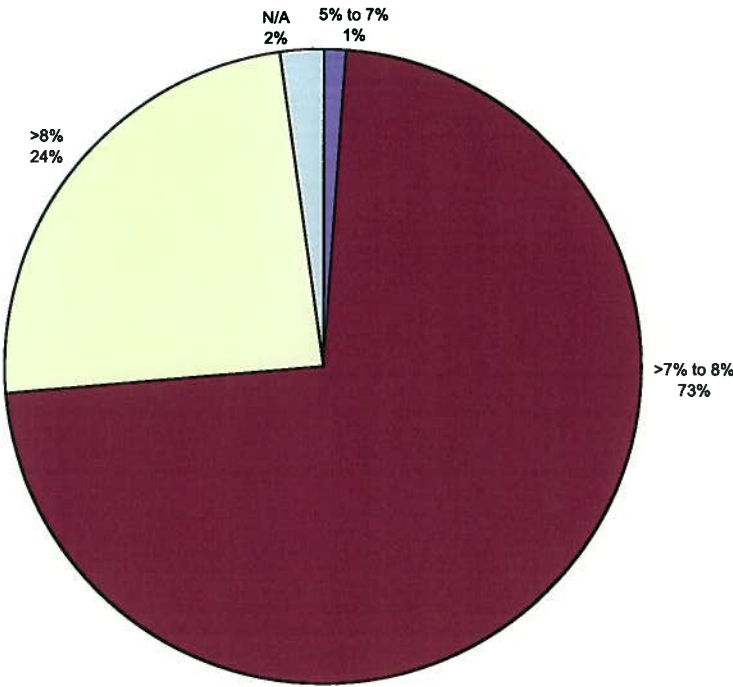


Figure 13. 2008 Plan Funding Ratios

